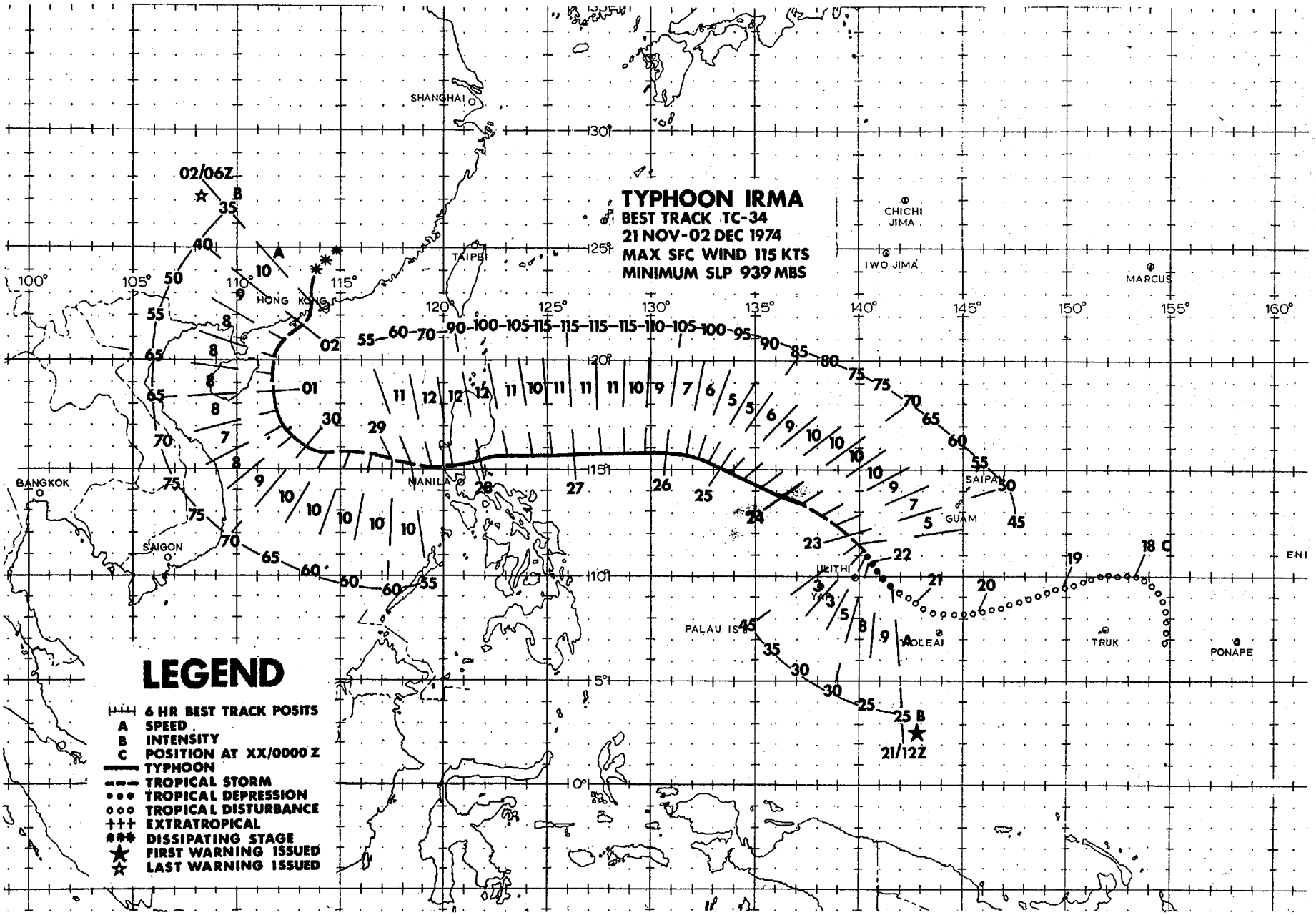
TYPHOON IRMA
BEST TRACK TC-34
21 NOV-02 DEC 1974
MAX SFC WIND 115 KTS
MINIMUM SLP 939 MBS
LEGEND
6 HR BEST TRACK POSITS
A SPEED
B INTENSITY
C POSITION AT XX/0000 Z
TYPHOON
TROPICAL STORM
TROPICAL DEPRESSION
TROPICAL DISTURBANCE
EXTRATROPICAL
DISSIPATING STAGE
FIRST WARNING ISSUED
LAST WARNING ISSUED
02/06Z
21/12Z
SHANGHAI
TAIPEI
HONG KONG
BANGKOK
SAIGON
MANILA
PALAU IS
CHICHI JIMA
IWO JIMA
MARCUS
SAIPAN
GUAM
UKITHI
YAP
ADLEAI
TRUK
PONAPE

The year's last typhoon, Irma terminated the barrage of late season typhoons to strike Luzon Island of the Philippine archipelago during October and November.

Initial development of Irma took place south of Guam as a depression in the monsoon trough. Passing north of Ulithi atoll on 22 November (Figure 4-28), Irma's circulation intensified rapidly producing typhoon force winds late on the 23rd. Like Elaine and Gloria, Irma's circulation dominated the Philippine Sea with the diameter of the 1000 mb isobar extending about 450 nm by the 23rd. The central pressure of the typhoon plummeted after passage of Ulithi until a minimum of 939 mb was recorded by aircraft reconnaissance 3 1/2 days later at 26/0635Z. Sustained surface winds generated around Irma's eye were estimated to be 115 kts during the 26th as the typhoon reached its peak intensity 400 nm east of Luzon.

Late on the 25th a massive high pressure ridge extending eastward from China to the Ryukyu chain prevented further poleward movement by Typhoon Irma near 16°N (Figure 4-29). This ridge dominated the region north of the typhoon through the 27th forcing Irma on an almost straight westerly track until it crossed the coast of Luzon. The turn of Irma to the west was very unusual. After reaching such a poleward latitude in the Philippine Sea few November typhoons fail to recurve.

Of the ships caught in the typhoon's gale force wind area in the Philippine Sea, the vessels MIKUNISAN MARU (200 nm west of the center at 25/1200Z), and a British ship (call sign GPIP) 200 nm northeast of the center at 26/0000Z) both reported 45 knot winds.

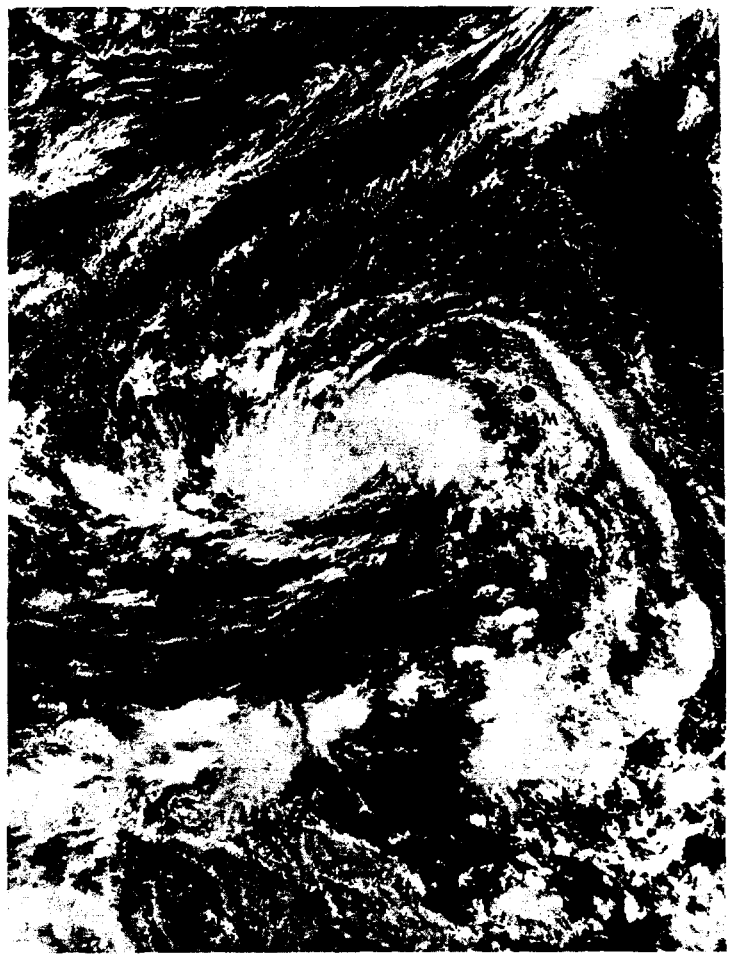

FIGURE 4-28. *Irma strengthening to tropical storm intensity 300 nm southwest of Guam, 22 November 1974, 0229Z. (DMSP imagery)*

Maritime casualties included several ships caught in heavy seas produced by Irma's pheripheral winds. The 5 ton Liberian ship PACIFICOEVERTT ran aground near Siarago Island in the southern portion of the Philippine archipelago, while the 4 1/2 ton Singapore ship FWSAN met the same fate at Nazasa Bay on Subic Bay. Reports from Catabato, Mindanao indicated the 2 ton Philippine vessel ZAMBOANGA CITY capsized and sunk offshore but all the crew survied. Not so fortunate was the 3 ton Panamanian ship GREEN HILL which sank after the cargo shifted 60 nm north of Miyako Jima in the Ryukyu chain. Of a crew of 20, four were lost.

Striking Luzon early on the 28th, the eye of Irma crossed the coastline 30 nm south of Baler, passing directly over Clark Air Base, later exiting Luzon near Iba on the west coast. Peak gusts of 74 knots and a minimum pressure of 983.9 mb were experienced at Baler. Later Clark AB recorded a barometric reading of 979.0 mb in the eye at 28/0700Z while registering a peak gust of 83 knots from the northwest at 28/0500Z. This was the highest recorded gust at Clark AB since before World War II. As Irma's eye emerged on the west coast, east-southeasterly winds peaking at 58 knots occurred at Iba as the pressure dropped to 983.5 mb.

Twenty-four hour rainfall totals from Irma generally varied from 2 to 5 inches over Luzon with an extreme of 6.7 inches recorded at Cubi Point Naval Air Station. This amount broke previous station records for the month of November (previous 24-hour maximum was 5.3 inches).

Irma brought strong gale force winds to the metropolitan area of Manila. A gust to 51 knots from the southwest was reported at the international airport while the port area experienced westerly winds gusting to 60 knots. Several ships in Manila Bay were reported blown almost to the Roxas Boulevard seawall during the seige.

Damage to public and private buildings, public works, crops, and livestock was estimated at $7.3 million. Over 1000 homes were reported destroyed or partially damaged by the winds. Newspaper reports indicated Irma claimed 11 lives in addition to sinking several small vessels and fishing boats.

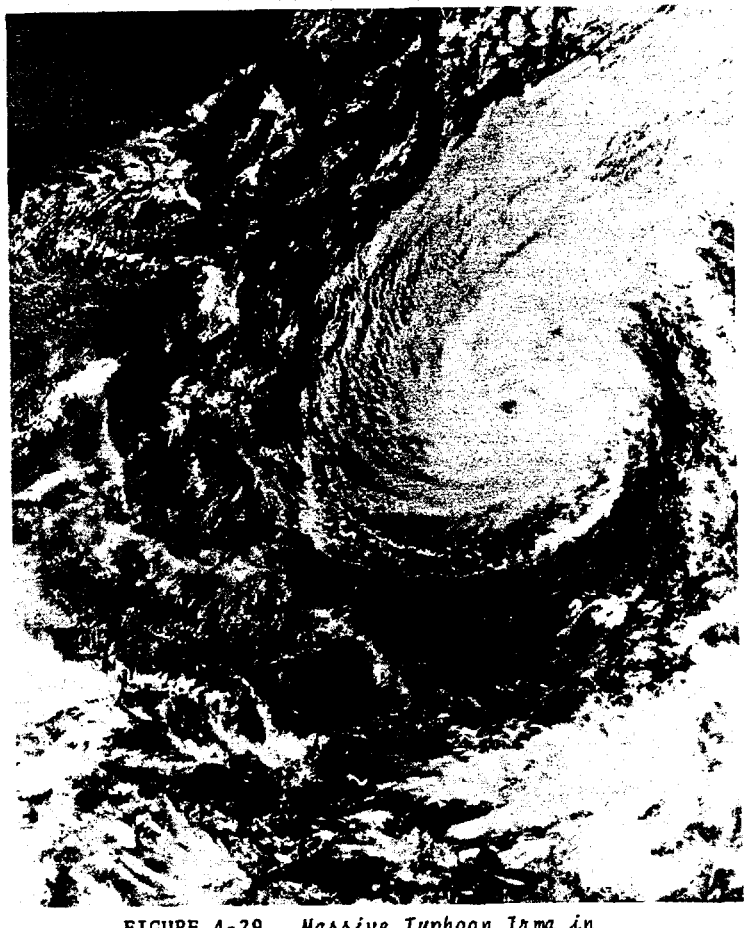

FIGURE 4-29. *Massive Typhoon Irma in the central Philippine Sea 500 nm east of Cantanduanes Island, 25 November 1974, 0315Z. [DMSP imagery]*

As Irma departed Luzon, the ridge of high pressure over South China weakened, allowing the cyclone, then of tropical storm strength, to take a slight poleward motion during its track across the South China Sea. Late on the 29th, pressure began to fall over southwestern China as remains of a tropical depression (formerly T.C. 30-74) moved into the area from Burma. Irma briefly regained typhoon strength during this period, and abruptly turned to the north on the 30th passing over the Paracel Islands. A meteorological station in the islands observed a pressure minimum of 970.5 mb (30/1200Z) and sustained (10 minute) wind of 60 knots as winds shifted from the west at 20/1500Z. Based on available records since 1945, no tropical cyclone has been as intense as Irma so late in the season in the northern South China Sea.

Passing abeam of Hainan Island on 1 December, Irma dropped below typhoon strength and rapidly filled while approaching the South China coast. Tracking 30 nm west of Hong Kong the circulation dissipated inland one day later. Maximum rainfall brought to Hong Kong by the weakening storm was 7.0 inches recorded at the Royal Observatory during the 2nd, while southerly winds gusting to 34 knots were observed at Cheung Chau. It is noteworthy to mention that Irma was the latest tropical storm on record to affect the South China coast.

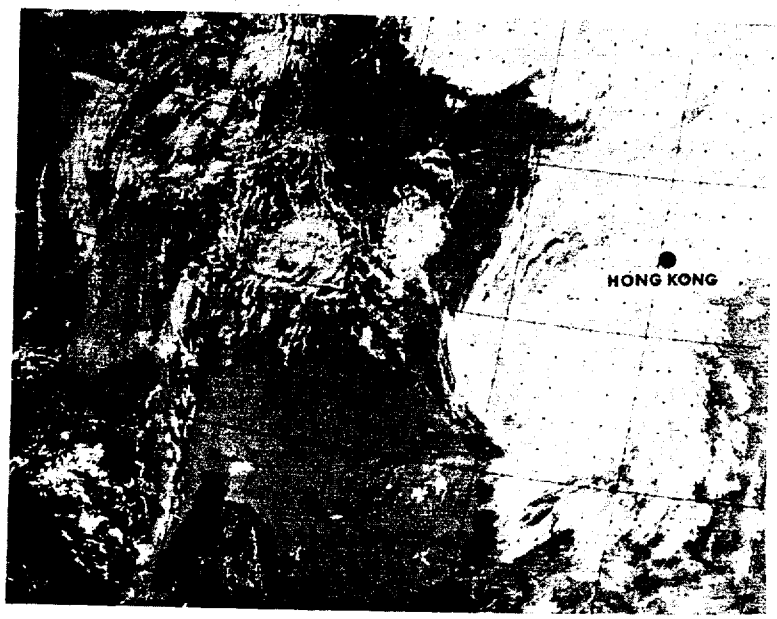

FIGURE 4-30. *Typhoon Irma 270 nm south-southwest of Hong Kong 1 December 1974, 0124Z. (DMSP imagery)*